Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A vaccine composition, comprising vaccine antigen and an interferon α and which induces both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface using vaccine antigen and adjuvant of this vaccine antigen by mucosal administration of this vaccine antigen and mucosal adjuvant at the same time or at different times and by the same route.

2. (Original) The vaccine composition according to claim 1, wherein the interferon α is selected from natural interferons α and recombinant interferons α.

3. (Original) The vaccine composition according to claim 1, wherein the amount of the interferon α used is 0.5 to 5,000,000 IU.

4. (Original) The vaccine composition according to claim 1, wherein the vaccine antigen is protein or peptide antigen.

5. (Original) The vaccine composition according to claim 1, with which mucosal administration of the vaccine and the adjuvant is performed at the same time.

6. (Original) The vaccine composition according to claim 5, with which administration of the vaccine and antigen is performed at the same time via the nasal mucous membranes.

7. (Original) A mucosal adjuvant for inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface, comprising an interferon α as the active ingredient of this mucosal adjuvant and with which mucosal administration of said mucosal adjuvant is performed at the same time as or at a different time than said vaccine antigen and by the same route as the administration route for said vaccine antigen.

8. (Original) The mucosal adjuvant according to claim 7, wherein the interferon α is selected from natural interferons α and recombinant interferons α.

9. (Original) The mucosal adjuvant according to claim 7, wherein the amount of the interferon α used is 0.5 to 5,000,000 IU.

10. (Original) The mucosal adjuvant according to claim 7, with which when a protein or peptide antigen is used as the vaccine antigen, mucosal administration is performed at the same time as or at a different time than the vaccine antigen and by the same route as said vaccine antigen.

11. (Original) The mucosal adjuvant according to claim 10, with which mucosal administration is performed at the same time as the vaccine antigen.

12. (Original) The mucosal adjuvant according to claim 11, with which administration is performed via the nasal mucous membranes by the same route as the vaccine antigen.

13. (Original) A combined product of a vaccine antigen and mucosal adjuvant for inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface, with which said mucosal adjuvant comprises an interferon α as the active ingredient and mucosal administration of said mucosal adjuvant is performed at the same time as or at a different time than said vaccine antigen and by the same route as the administration route for said vaccine antigen.

14. (Original) The combined product according to claim 12, wherein the interferon α is selected from natural interferons α and recombinant interferons α.

15. (Original) The combined product according to claim13, wherein the amount of the interferon α used is 0.5 to 5,000,000 IU.

16. (Original) The combined product according to claim 13, wherein the vaccine antigen is a protein or peptide antigen.

17. (Original) The combined product according to claim 13, with which mucosal administration of the vaccine antigen and mucosal adjuvant is performed at the same time.

18. (Original) The combined product according to claim 17, with which administration of the interferon α and the mucosal adjuvant is performed via the nasal mucous membranes by the same route as the vaccine antigen.

19. (Original) A mucosal adjuvant for inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface, comprising an interferon α as the active ingredient.

20. (Canceled)

21. (Original) A mucsal immune response activation method, comprising administration of mucosal adjuvant containing interferon α as the active ingredient at the same time as or at a different time than the vaccine antigen and by the same administration route as the vaccine antigen to subjects in whom it is necessary to augment immunity by inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface.

22. (Original) A method of inducing both vaccine antigen-specific antibody in blood and vaccine antigen-specific antibody secreted at the mucosal surface using vaccine antigen and adjuvant of this vaccine antigen, comprising

(1) mucosal administration of vaccine antigen,

(2) the use of an interferon α as the active ingredient of the adjuvant,

(3) administration of said adjuvant at the same time as or at a different time than said vaccine antigen, and

(4) mucosal administration of said adjuvant by the same administration route as said vaccine antigen.

23. (Original) The method according to claim 22, wherein the interferon α is selected from natural interferons α and recombinant interferons α.

24. (Original) The method according to claim 23, wherein the amount of interferon α used is 0.5 to 5,000,000 IU.

25. (Original) The method according to claim 23, wherein the vaccine antigen is protein or peptide antigen.

26. (Original) The method according to claim 23, wherein mucosal administration is performed at the same time.

27. (Original) The method according to claim 26, wherein administration is via the nasal mucous membrane.